

Remarks

Preliminary Matters

Claims 3 and 7 have been cancelled. No Claims have been added. No additional fees are required. If determined otherwise, the Office is authorized to charge Deposit Account No. 07-1077 for the amount.

§ 103 Rejections

The following rejections were made; the same ones as made during the Non-Final phase of rejection/response.

1. Claims 1-10 using Laughner et al. (US 5,196,479) in view of Chung et al. (US 2005/0065263).
2. Claims 1-10 using Lacroix et al. (US 7022768) in view of Cartasegna (US 4,883,840) and further in view of Chung et al. (US 2005/0065263).

In response, Applicants have amended their claims again and submit these remarks in support of those amendments. Applicants also incorporate their prior remarks by reference.

Claim 1 has been amended to establish a two resin blend with a two impact modifier system with optional additives imported from now-cancelled Claim 7.

Claim 8 has been amended in accord with Claim 1.

Claims 1-10 now are patentable over Laughner et al. + Chung et al. because Applicants have amended Claim 1 to recite that their polymer resins consist essentially of a polyester and a polycarbonate and no other resin (which would materially affect the novel and basic characteristics of the composition.)

The proof of characteristics changed by the presence of the additional materials is found in Laughner et al. patent itself.

Laughner et al. *requires* polyphenylene ether to be present, which Applicants neither need nor desire for their thermoplastic polymer blend. A review of the Examples of Laughner et al. show blends of only polyester and polycarbonate are consistently regarded as Controls. Please see Controls A-G and J-K.

For example, please focus on Control J and Examples 9-12 in Table VI. How J differs from 9-12 in formulation is the *absence* of PPE. The physical properties of J is much different than those properties for Examples 9-12: Izod is *at least* 244% less. *Something* rather basic about the composition happens when PPE is present as a third thermoplastic resin, as the Izod test results show. Applicants claim two thermoplastic resins: polyester and polycarbonate. The third alters their blend, as Laughner et al. show.

Looking again at Table VI, something quite surprising about Laughner et al.'s three-resin combination is found. As the amount of PPE progresses from 0 to 20 to 60 to 100 to 140 parts by weight, the Izod value peaks at 20 parts by weight and then levels off at 60-100-140 parts by weight. **Example 9 is a 1% PPE formulation.** Example 9 shows a **277% increase in Izod value over Control J with 1% of PPE being present.**

Applicants have justified their use of "consisting essentially of" because even 1% of PPE would dramatically alter properties of polyester and polycarbonate blends.

Chung et al. also does not focus on a polymer blend consisting essentially of polycarbonate and polyester. Indeed, Chung et al. does not even appear to be suggesting any blend of a second polymer resin with polycarbonate.

Therefore, Claims 1, 2, 4-6, and 8-10 as amended are patentable over the combination of Laughner et al. and Chung et al.

Claims 1, 2, 4-6, and 8-10 are also patentable over Lacroix et al. in view of Cartasegna and further in view of Chung et al. for the reasons set forth in the first response and also for the following reasons:

Lacroix et al. teach *toward* three impact modifiers,

one of which must be a core/shell copolymer (A),

one of which must be either

an ethylene copolymer (B1) of ethylene, an unsaturated carboxylic acid anhydride and an ester of an unsaturated carboxylic acid, or

an ethylene-unsaturated epoxide copolymer (B2), and
one of which must be either

a copolymer of ethylene and alkyl(meth)acrylate (C1), or
a copolymer of ethylene and (meth)acrylic acid (C2).

Thus, Lacroix et al. teaches PHOSITA to work with any of four combinations of three different impact modifiers, *none of which* is a thermoplastic vulcanizate having partially or fully crosslinked EPDM as the elastomer phase.

Carasegna teaches *toward* two impact modifiers,

one of which must be either

EPM or

EPDM, and

one of which must be either

ethylene homopolymer or

ethylene copolymer.

Thus, Carasegna teaches PHOSITA to work with any of four combinations of two different impact modifiers, none of which is a thermoplastic vulcanizate¹ (a blend of a polyolefin and a rubber, such as EPDM, such that the thermoplastic vulcanizate remains as distinct domains having an elastomer phase within the thermoplastic polymer blend (Paragraphs [0006] and [0008] of the publication of this application).

KSR v. Teleflex does not mandate the Office to reject the claims in this situation where one reference teaches PHOSITA toward four combinations of three different impact modifiers and the second reference teaches PHOSITA toward four totally different combinations of two different impact modifiers. No PHOSITA would find it even obvious *to try* to construct Applicants' particular claimed combination of impact modifiers exemplified by Applicants: (1) thermoplastic vulcanizate having an EPDM elastomer phase and (2) a core/shell polymer with an elastomeric core.

¹ The particles of rubber (EPM or EPDM) and the particles of ethylene polymer (homopolymer or copolymer) are either both separately but well dispersed in the polycarbonate blend or are particles of rubber encasing the ethylene polymer particles. (Col. 5, Lines 1-25). What the Carasegna impact modifier is NOT is a particle of thermoplastic vulcanizate (dispersed phase of rubber in a continuous phase of polyolefin).

The law has not changed to permit the Office to consider prior art references in pieces suitable for hindsight reconstruction and discard the other pieces of those prior art references as immaterial or non-existent. The references must be read as a whole.

As stated in the last response, Applicants were willing to limit their claims to what they have exemplified. That has not changed. It is true that Applicants offered an optional third impact modifier in their disclosure and original claims but now confine their combination to two impact modifiers which neither of Lacroix et al. nor Carasegna teach or suggest.

KSR v. Teleflex did not completely reject Teaching-Suggestion-Motivation (TSM) as an examination tool; KSR v. Teleflex rejected TSM as a rigid rule. Where is the *motivation* for PHOSITA to pick and choose a bit from Lacroix et al. and bit from Carasegna and leave the rest of those documents to the scrap bin?

Thus to PHOSITA, Lacroix et al. are teaching one combination of impact modifiers and Cartasegna is teaching a second combination of impact modifiers in a totally different direction from the Lacroix et al. combination. It would not be obvious to PHOSITA to combine bits of impact modifier teaching from Lacroix et al. (which are taught not to be their invention) with bits of impact modifier from Cartasegna (which are also taught not to be his invention) in order to land upon the particular combination which Applicants have found to be successful. Chung et al. remains unable to fill in the gaps about impact modifiers that remain with Lacroix et al. and Cartasegna, pure and simple.

Claims 1, 2, 4-6, and 8-10 as amended are patentable over the attempted combination of Lacroix et al. and Cartasegna and Chung et al.

Applicants are ready for a Notice of Allowance for Claims 1, 2, 4-6, and 8-10 or an appeal.

Respectfully submitted by:

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